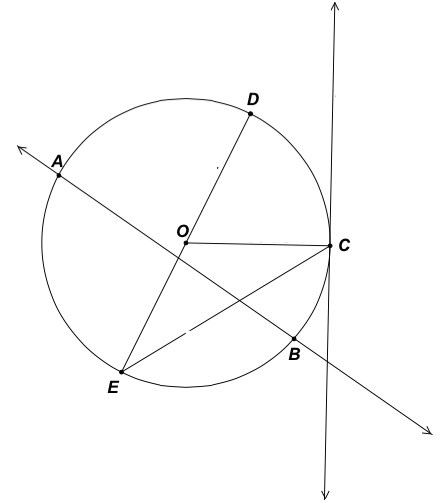
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**6.1: Introduction to Circles**

Vocabulary:

1. A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is the set of all points in a plane that are equidistant from the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
2. A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of a circle is a line segment whose endpoints are the center of the circle and a point on the circle. The distance from the center of a circle to a point on the circle is also called the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** The plural of radius is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
3. A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of a circle is a line segment whose endpoints are both points on the circle.
4. A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of a circle is a chord that passes through the center of the circle.
5. A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a line that intersects a circle at two points. A secant of a circle includes a chord of the circle.
6. A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of a circle is a line that intersects a circle at a single point. The point of intersection is called the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.



Center of circle:

Radius:

Diameter:

Chord:

Secant:

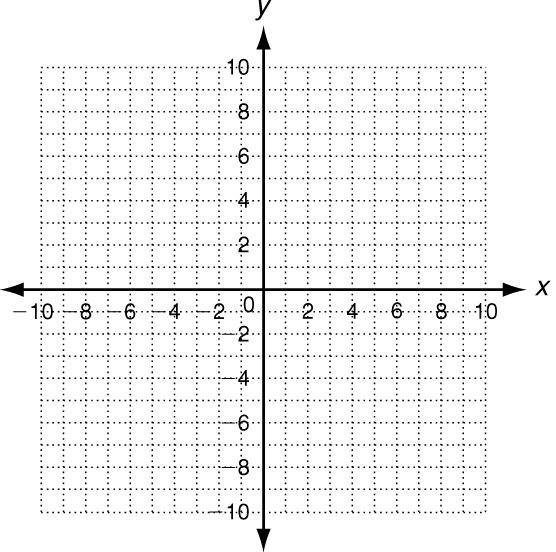
Tangent Line:

Point of Tangency:

1. Are the two circles congruent? Why or why not?

2. How do we know if two circles are congruent?

3. What geometric relationship exists between the two circles?



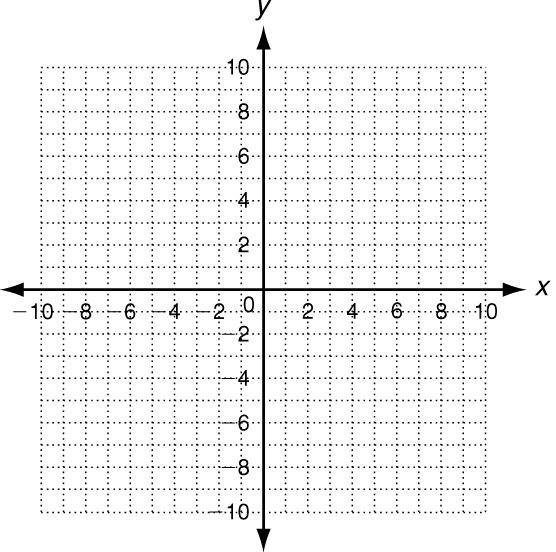
(ex 1) Can we move a circle D with center (-1, 2) and

radius of 3 to cover circle P with center (3, 4) and radius of 5?

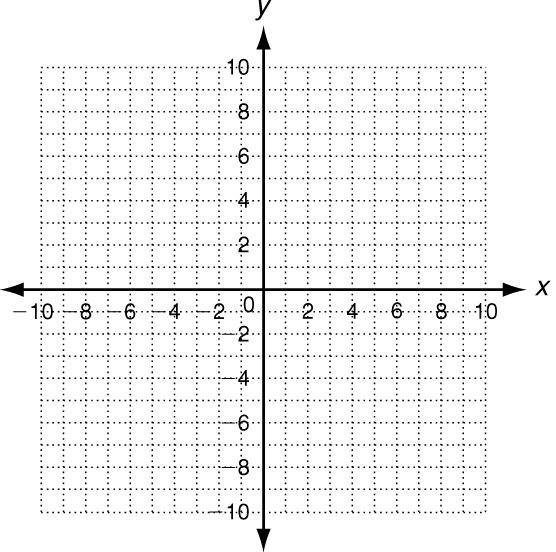
**What have you just learned?**

**Will this always work for any two circles? Why or why not?**

Show the two given circles are similar by stating the necessary transformations from C to D.

****

(ex 2) C: center (2, 3) radius 4; D: center (–1, 4) radius 2.

****(ex 3) C: center (0, –3) radius 2; D: center (–2, 5) radius 6.

Are all circles similar? How do we know?